## ABSTRACT

Disclosed is a honeycomb structure 10 made by joining a plurality of honeycomb segments 1, 2 in each of which a plurality of cells each having a rectangular sectional shape are formed between partition walls 3 which are at right angles to each other. At least a portion of the honeycomb segments 1 constituting the outer periphery 5 of the honeycomb structure 10 has a structure in which compression strength is larger than that of the honeycomb segments 2 constituting the other portions of the honeycomb structure 10.